

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460



February 11, 2003

OFFICE OF AIR AND RADIATION

Dr. Inés R. Triay, Manager Carlsbad Field Office U.S. Department of Energy P.O. Box 3090 Carlsbad, NM 88221

Dear Dr. Triay:



I am responding to the Department of Energy's (DOE)'s letter of June 28, 2002, that requested approval by the Environmental Protection Agency (EPA) to dispose of classified transuranic (TRU) waste at the Waste Isolation Pilot Plant (WIPP). The EPA thanks the Department of Energy (DOE) for its response of November 27, 2002, providing the EPA with additional information. Based on the information provided by DOE, and for the reasons set forth below, EPA is approving DOE's request. The EPA will verify that the classified wastes from the Rocky Flats Environmental Technology Site (RFETS)—identified by DOE as the only site currently ready to characterize and dispose of classified wastes—fall within the range of the TRU debris waste (waste summary group S5000) from the Rocky Flats Environmental Technology Site (RFETS) currently approved for disposal at the WIPP.

On September 6, 2002, EPA responded to the DOE letter of June 28, 2002, requesting additional information in the following three areas:

- Composition of wastes containing classified materials, 1.
- Information on the declassification process and DOE's rationale for abandoning the 2. existing commitment in the Compliance Certification Application (CCA), and
- Information to document/confirm that waste characteristics/components of waste 3. containing classified materials are within the waste envelope approved in the certification decision.

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On November 27, 2002, DOE provided the information requested by EPA and asserted the following:

- Waste containing classified materials at RFETS is the same as the debris waste that EPA has already approved. (DOE provided detailed descriptions of waste streams containing classified waste to document its assertion.) Waste at other DOE TRU sites— Nevada Test Site, Hanford Site, Los Alamos National Laboratory, Lawrence Livermore National Laboratory, and Savannah River Site—is similar to the RFETS's classified waste.
- At the time of the certification, DOE Order 5820.2A governed radioactive waste management for DOE sites and programs. DOE Order 5820.2A stated, "[TRU] waste that is classified for security reasons shall be treated to remove or destroy the classified characteristic(s) prior to certification [for disposal at the WIPP]. Declassification should be performed by the generator." DOE Order 5820.2A was replaced in 1999 by DOE Order 435.1 and the related manual (DOE Manual 435.1) and guide (DOE Guide 435.1). DOE Guide 435.1 supports sanitization of classified materials in waste if it is economical and cost effective. In the case of waste disposal at WIPP, sanitization is not the most cost effective approach over the operational period of the repository. (To support this assertion, DOE provided to the EPA an analysis performed in 2000 by the "DOE Working Group on Classified (Non-SNM) Contaminated Weapons Parts and Process Equipment." In this analysis, DOE contends that the costs associated with declassification of these wastes would double the direct disposal costs from \$22 million to \$44 million.)
- Several waste streams at RFETS that were included in the Transuranic Waste Baseline Inventory Report comprised sanitized (that is, declassified) materials referred to as "classified waste." These waste streams are similar in physical, chemical, and radiological composition to those being proposed for disposal without sanitization. (DOE provided Waste Stream Profile Forms as documentation to support this assertion.)
- Components considered significant to the WIPP repository performance—ferrous metals, nonferrous metals, cellulosic plastic rubber, and radionuclides—will be tracked in the WWIS for waste streams containing classified materials in the same way as they are tracked for all TRU waste streams disposed at WIPP. This will ensure the upper and lower limiting values are not exceeded.

Using this information, the Agency has determined that approving the classified wastes for disposal at WIPP is not considered to be a significant departure from the WIPP certification decision for the following reasons:

• Classified wastes comprise a small waste volume of the total waste capacity (0.1 - 0.3%);

- Classified wastes are closely analogous to unclassified debris waste;
- Classified wastes will be characterized using only approved waste characterization processes, procedures and equipment; and
- EPA inspections will facilitate the Agency's confirmation of assurances from DOE that the above are true.

Therefore, approval is granted subject to the DOE complying with the following conditions.

- A. Approval is limited to wastes for which only the geometry is "classified." EPA expects DOE to fully characterize these wastes as any other TRU waste stream. Disposal of classified waste from generator sites is subject to existing waste stream or site approvals. If the classified waste does not fall under the current categories of waste approved for disposal from the characterizing site, an expansion of the approval is necessary. DOE will notify EPA and we will conduct an inspection in accordance with 40 CFR 194.8 prior to granting approval.
- B. Prior to characterizing classified waste at any waste generator site, DOE will notify the EPA of its intent to dispose of duly-characterized classified waste streams from that site at the WIPP. DOE will not dispose of these waste streams until EPA has reviewed the notification, inspected the waste characterization process, as needed, and/or approved the subject characterization process. The notification package will include:
 - Detailed waste characterization information showing whether classified waste is analogous to the previously-approved TRU waste at the site:
 - Copies of procedures which were modified to include any special provisions for characterizing classified waste; and
 - An estimate of the total number of drums of classified waste expected to be sent from the site for disposal at the WIPP.
- C. DOE must track important waste components from classified waste to ensure that repository limits are not violated. The DOE is responsible for demonstrating and tracking that the total of each of the classified waste components critical to the containment of transuranic waste will be within approved limits. As committed by DOE in your letter of November 27, 2002, important components for waste streams containing classified materials must be tracked in the WWIS in the same way as they are tracked for all TRU waste streams disposed at the WIPP. On a quarterly basis (the first report should cover the period from the date of this letter through June 30, 2003), DOE will report to EPA the number of drums of classified waste emplaced in the WIPP from each waste generator site and the total amount of WWIS-tracked waste components attributable to those drums.

D. <u>DOE</u> must provide and maintain appropriate security clearances for EPA inspectors. This will ensure that, at its discretion, EPA has appropriate access to inspect a site's waste characterization process for classified waste separately from other similar waste approved for characterization at the site. EPA will designate which inspectors require clearances and will comply with all DOE requirements to submit applications and information for clearances. DOE will initiate the process of obtaining clearances as soon as possible and will bear the cost of obtaining and updating clearances for EPA inspectors.

We understand that RFETS is the first site that plans to dispose of classified waste at the WIPP, and DOE has provided significant documentation regarding RFETS waste in the aforementioned letters regarding classified waste. We believe that a new approval of the classified waste at RFETS under 40 CFR 194.8 is not necessary based on DOE's documentation that the waste is within the range of TRU debris waste that RFETS is already approved to characterize for disposal. In order to meet fully the conditions described above, DOE must provide to EPA (1) the estimated number of drums of classified waste expected to be shipped from RFETS, and (2) copies of procedures that have been modified to include any special provisions for characterizing classified waste. Upon receipt of this information by EPA, RFETS is deemed to have met the conditions described above, and DOE is authorized to emplace in the WIPP classified waste from RFETS that DOE is able to verify is similar to waste already approved for disposal and that has been characterized using approved equipments and procedures. The EPA will confirm that assertion, and ensure that RFETS has used the approved "system of controls" for characterizing and tracking classified waste, as part of the site recertification inspection currently scheduled in March 2003. Subsequent to that inspection, we will issue a letter containing our inspection results. For RFETS only, and because this is our first opportunity to observe and confirm the characterization of classified waste, DOE is not authorized to close Panel 1 until EPA issues its inspection results.

If you or your staff have any questions regarding our decision, please contact Betsy Forinash at (202) 564-9233.

Sincerely

Frank Marcinowski, Director

Radiation Protection Division

cc: Matthew Silva, EEG Steve Zappe, NMED WIPP Docket